

WHAT IS CLAIMED IS:

1. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device, the method comprising the steps of:
- 5 initiating a connect mode in the heart rate monitor, the connect mode enabling wireless communication link to be established with the heart rate monitor;
- initiating transfer software in the portable computer device, the transfer software controlling the transfer of information between the heart rate monitor and the portable computer device through the wireless communication link;
- 10 transferring the information between the heart rate monitor and the portable computer device through the communication link; and
- processing the heart rate information in the portable computer device.
2. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of processing further includes the step of displaying the processed information on the portable computer device.
- 15
3. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the wireless communication link is Bluetooth.
- 20
4. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, further comprising the step of connecting a first wireless communication interface to the portable computer device and a second wireless communication interface to the heart rate monitor, the first wireless communication interface enabling the portable computer device to communicate
- 25

through the communication link, the second wireless communication interface enabling the heart rate monitor to communicate through the communication link.

5. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, further comprising the step of maintaining at least one of a physical location between and an orientation of at least one of the heart rate monitor and the portable computer device during the transfer of the information.

6. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the portable computer device includes at least one of a personal digital assistant (PDA), pocket personal computer (pocket PC), and laptop computer.

7. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the information includes at least one of setting information, heart rate information, and training information.

8. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of transferring the information between the heart rate monitor and the portable computer device includes at least one of the steps of uploading the information from the portable computer device to the heart rate monitor and downloading the information from the heart rate monitor to the portable computer device.

9. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of initiating transfer software in the

portable computer device includes the step of initiating transfer setting information software in the portable computer device, the transfer setting information controlling the transfer of setting information between the heart rate monitor and the portable computer device.

5 10. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of initiating transfer software in the portable computer device includes the step of initiating transfer heart rate/training
10 information software in the portable computer device, the heart rate/training information software controlling the transfer of heart rate/training information from the heart rate monitor to the portable computer device.

 11. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the
15 heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of transferring the information between the heart rate monitor and the portable computer device includes the steps of:

 initiating an upload setting information mode in the portable computer device;

20 uploading setting information from the portable computer device to the heart rate monitor; and

 returning the heart rate monitor to a normal mode in response to completion of the upload of the setting information.

 12. A method of processing heart rate information in a portable computer
25 device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of transferring the information between the heart rate monitor and the portable computer device includes the steps of:

 initiating a download setting information mode in the portable
30 computer device;

downloading setting information from the heart rate monitor to the portable computer device; and

initiating a normal mode in the heart rate monitor in response to completion of the download of the setting information.

5 13. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of transferring the information between the heart rate monitor and the portable computer device includes the steps of:

10 initiating a batch heart rate/training information transfer mode in the portable computer device;

transferring batch heart rate/training information from the heart rate monitor to the portable computer device; and

15 returning the heart rate monitor to a normal mode in response to completion of the batch transfer of the heart rate/training information.

20 14. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 13, wherein the step of transferring batch heart rate/training information includes the steps of:

initiating wireless communication with the heart rate monitor by the portable computer device;

requesting heart rate monitor information from the heart rate monitor by the portable computer device;

25 transferring the heart rate monitor information from the heart rate monitor to the portable computer device;

requesting file information from the heart rate monitor by the portable computer device;

transferring the file information from the heart rate monitor to the portable computer device;

requesting heart rate information from the heart rate monitor by the portable computer device;

5 transferring the heart rate information from the heart rate monitor to the portable computer device; and

storing the heart rate information in the portable computer device.

15. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, wherein the step of initiating wireless communication with the heart rate monitor by the portable computer device includes the step of initializing a serial port on the portable computer device.

16. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, wherein the step of requesting file information from the heart rate monitor by the portable computer device includes at least one of the steps of verifying whether the heart rate information has been substantially completely transferred to the portable computer device in the form of files, specifying the index of at least one of the transferred files to be processed by the portable computer device, and requesting information associated with at least one of the transferred files.

17. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, wherein the step of transferring the file information from the heart rate monitor to the portable computer device includes the step of transferring information associated with at least one of the transferred files.

18. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, wherein the step of requesting heart rate information
5 from the heart rate monitor by the portable computer device includes the step of requesting a quantity of samples, information associated with at least one of the samples, a quantity of laps, and information associated with at least one of the laps.

19. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the
10 heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, wherein the step of transferring the heart rate information from the heart rate monitor to the portable computer device includes the step of transferring a quantity of samples, information associated with at least one of the samples, a quantity of laps, and information associated with at least one of the
15 laps.

20. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, further comprising the step of terminating wireless
20 communication with the heart rate monitor by the portable computer device.

21. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, further comprising the step of processing the heart rate
25 information by the portable computer device.

22. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 21, wherein the step of processing the heart rate
30 information in the portable computer device further includes the step of performing at least one of graphical analysis and statistical analysis.

23. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 21, wherein the step of processing the heart rate
5 information by the portable computer device includes the step of calculating at least one of a duration of time in a target heart rate zone, a duration of time above the target heart rate zone, a duration of time below the target heart rate zone, an average heart rate, and a VO_2 level.

24. A method of processing heart rate information in a portable computer
10 device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 14, further comprising the step of synchronizing the transfer of heart rate information with a program on at least one of the portable computer device and the Internet.

25. A method of processing heart rate information in a portable computer device comprising monitoring by a heart rate monitor and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 1, wherein the step of transferring the information
15 between the heart rate monitor and the portable computer device includes the steps of:

20 initiating a real-time heart rate/training information transfer mode in the portable computer device;

transferring heart rate/training information from the heart rate monitor to the portable computer device in substantially real-time; and

25 returning the heart rate monitor to a normal mode in response to completion of the substantially real-time transfer of the heart rate/training

26. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device, the system comprising:

a heart rate monitor, the heart rate monitor having a connect mode, the connect mode enabling wireless communication link to be established with the heart rate monitor; and

5 a portable computer device, the portable computer device including transfer software, the transfer software controlling the transfer of information between the heart rate monitor and the portable computer device through the wireless communication link.

27. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate
10 information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the portable computer device includes a display for displaying the processed information.

28. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate
15 information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the wireless communication link is selected from the group consisting of infrared, sonic, audible, ultrasonic, magnetic, radio frequency, and IEEE 802.11.

29. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate
20 information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the wireless communication link is Bluetooth.

30. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate
25 information between the heart rate monitor and the portable computer device as defined by Claim 26, further comprising at least one of a first wireless communication interface coupled to the portable computer device and a second wireless communication interface coupled to the heart rate monitor, the first wireless communication interface enabling the portable computer device to communicate
30 through the communication link, the second wireless communication interface enabling the heart rate monitor to communicate through the communication link.

31. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 30, wherein at least one of the first wireless communication interface and the second wireless communication interface includes at least one of an infrared transmit path and an infrared receive path.

32. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 31, wherein the infrared transmit path includes an amplifier and an infrared light emitting diode responsive to the amplifier.

33. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 32, wherein the infrared receive path includes a photo-diode and an amplifier responsive to the photo-diode.

34. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 30, wherein at least one of the first wireless communication interface and the second wireless communication interface includes a baseband controller, a firmware link manager, host controller interface firmware, physical bus firmware, and an antenna.

35. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein a physical location between and an orientation of at least one of the heart rate monitor and the portable computer device is substantially maintained during the transfer of the information.

36. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate

information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the portable computer device includes at least one of a personal digital assistant (PDA), pocket personal computer (pocket PC), and laptop computer.

5 37. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the information includes at least one of setting information, heart rate information, and training information.

10 38. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the information is at least one of uploaded from the portable computer device to the heart rate monitor and downloaded from the heart rate
15 monitor to the portable computer device.

 39. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the portable computer device includes an upload setting
20 information mode and the heart rate monitor includes a normal mode, the portable computer device uploading setting information from the portable computer device to the heart rate monitor in response to initiating the upload setting information mode, the heart rate monitor returning to the normal mode in response to completion of the upload of the setting information.

25 40. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the portable computer device includes a download setting information mode and the heart rate monitor includes a normal mode, the
30 portable computer device downloading setting information from the heart rate monitor to the portable computer device in response to initiating the download setting

information mode, the heart rate monitor returning to the normal mode in response to completion of the download of the setting information.

41. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 26, wherein the portable computer device includes a batch heart rate/training information transfer mode and the heart rate monitor includes a normal mode, the portable computer device transferring batch heart rate/training information from the heart rate monitor to the portable computer device in response to initiating the batch heart rate/training information transfer mode, the heart rate monitor returning to the normal mode in response to completion of the batch transfer of the heart rate/training information.

42. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 41, wherein the portable computer device initiates wireless communication with the heart rate monitor, requests heart rate monitor information from the heart rate monitor, transfers the heart rate monitor information from the heart rate monitor, requests file information from the heart rate monitor, transfers the file information from the heart rate monitor, requests heart rate information from the heart rate monitor, transfers the heart rate information from the heart rate monitor, and stores the heart rate information in the portable computer device.

43. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 42, wherein the portable computer device performs at least one of verifying whether the heart rate information has been substantially completely transferred to the portable computer device in the form of files, specifying the index of at least one of the transferred files to be processed by the portable computer device, and requesting information associated with at least one of the transferred files.

44. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 42, wherein the portable computer device transfers information associated with at least one of the transferred files.

45. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 40, wherein the portable computer device processes the heart rate information.

46. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 42, wherein the portable computer device performs at least one of graphical analysis and statistical analysis on the heart rate information.

47. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 45, wherein the portable computer device calculates at least one of a duration of time in a target heart rate zone, a duration of time above the target heart rate zone, a duration of time below the target heart rate zone, an average heart rate, and a VO_2 level.

48. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 42, wherein the portable computer device synchronizes the transfer of heart rate information with a program on at least one of the portable computer device and the Internet.

49. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as

defined by Claim 26, wherein the portable computer device includes a real-time heart rate/training information transfer mode and the heart rate monitor includes a normal mode, the portable computer device transferring heart rate/training information from the heart rate monitor to the portable computer device in substantially real-time in response to initiating the real-time heart rate/training information transfer mode, the heart rate monitor being returned to the normal mode in response to completion of the transfer of the heart rate/training information in substantially real-time.

50. A heart rate monitor that wirelessly exchanges information with a portable computer device, the heart rate monitor comprising;

10 a wireless interface circuit; and

a connect mode, the connect mode enabling a wireless communication link to be established with the portable computer device through the wireless interface circuit.

51. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 50, wherein the wireless communication link is selected from the group consisting of infrared, sonic, audible, ultrasonic, magnetic, radio frequency, and IEEE 802.11.

52. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 50, wherein the wireless communication link is Bluetooth.

53. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 50, wherein the information includes at least one of setting information, heart rate information, and training information.

54. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 50, wherein the information is transferred as a batch.

55. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 50, wherein the information is transferred in substantially real-time.

56. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 50, wherein the wireless interface circuit includes at least one of an infrared transmit path and an infrared receive path.

57. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 56, wherein the infrared transmit path includes an amplifier and an infrared light emitting diode responsive to the amplifier.

58. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 56, wherein the infrared receive path includes a photo-diode and an amplifier responsive to the photo-diode.

59. A heart rate monitor that wirelessly exchanges information with a portable computer device as defined by Claim 50, wherein the wireless interface circuit includes a baseband controller, a firmware link manager, host controller interface firmware, physical bus firmware, and an antenna.

60. A portable computer device that wirelessly exchanges information with a heart rate monitor, the portable computer device comprising:

a wireless interface circuit;

transfer software, the transfer software controlling the transfer of information between the heart rate monitor and the portable computer device on a wireless communication link through the wireless interface circuit; and

processing software, the processing software processing the information.

61. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the portable computer device includes a display for displaying the processed information.

62. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the wireless communication link is selected from the group consisting of infrared, sonic, audible, ultrasonic, magnetic, radio frequency, and IEEE 802.11.

63. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the wireless communication link is Bluetooth.

5 64. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the information includes at least one of setting information, heart rate information, and training information.

65. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the information is transferred as a batch.

10 66. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the information is transferred in substantially real-time.

15 67. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the portable computer device includes at least one of a personal digital assistant (PDA), pocket personal computer device (pocket PC), and laptop computer.

68. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the portable computer device performs at least one of graphical analysis and statistical analysis on the information.

20 69. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the portable computer device calculates at least one of a duration of time in a target heart rate zone, a duration of time above the target heart rate zone, a duration of time below the target heart rate zone, an average heart rate, and a VO₂ level.

25 70. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the portable computer device synchronizes the transfer of information with a program on at least one of the portable computer device and the Internet.

71. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the wireless interface circuit includes at least one of an infrared transmit path and an infrared receive path.

72. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 71, wherein the infrared transmit path includes an amplifier and an infrared light emitting diode responsive to the amplifier.

73. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 71, wherein the infrared receive path includes a photo-diode and an amplifier responsive to the photo-diode.

74. A portable computer device that wirelessly exchanges information with a heart rate monitor as defined by Claim 60, wherein the wireless interface circuit includes a baseband controller, a firmware link manager, host controller interface firmware, physical bus firmware, and an antenna.

75. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device, the system comprising:

a heart rate sensor, the heart rate sensor having a connect mode, the connect mode enabling a wireless communication link to be established with the heart rate sensor;

a portable computer device, the portable computer device including transfer software, the transfer software controlling the transfer of information between the heart rate sensor and the portable computer device through the wireless communication link, the portable computing device including processing software, the processing software processing the information.

76. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the portable computer device includes a display for displaying the processed information.

77. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the wireless communication link is selected from the group consisting of infrared, sonic, audible, ultrasonic, magnetic, radio frequency, and IEEE 802.11.

78. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the wireless communication link is Bluetooth.

79. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 75, further comprising at least one of a first wireless communication interface coupled to the portable computer device and a second wireless communication interface coupled to the heart rate sensor, the first wireless communication interface enabling the portable computer device to communicate through the communication link, the second wireless communication interface enabling the heart rate sensor to communicate through the communication link.

80. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 79, wherein at least one of the first wireless communication interface and the second wireless communication interface include at least one of an infrared transmit path and an infrared receive path.

81. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 80, wherein the infrared transmit path includes an amplifier and an infrared light emitting diode responsive to the amplifier.

82. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 80, wherein then infrared receive path includes a photo-diode and
5 an amplifier responsive to the photo-diode.

83. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 79, wherein at least one of the first wireless communication
10 interface and the second wireless communication interface includes a baseband controller, a firmware link manager, host controller interface firmware, physical bus firmware, and an antenna.

84. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate
15 information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the portable computer device includes at least one of a personal digital assistant (PDA), pocket personal computer (pocket PC), and laptop computer.

85. A system for processing heart rate information in a portable computer
20 device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the information includes at least one of setting information, heart rate information, and training information.

86. A system for processing heart rate information in a portable computer
25 device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the information is at least one of uploaded from the portable computer device to the heart rate sensor and downloaded from the heart rate sensor to the portable computer device.

87. A system for processing heart rate information in a portable computer
30 device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate

information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the portable computer device includes a batch heart rate/training information transfer mode and the heart rate sensor includes a normal mode, the portable computer device transferring batch heart rate/training information from the heart rate sensor to the portable computer device in response to initiating the batch heart rate/training information transfer mode, the heart rate sensor returning to the normal mode in response to completion of the batch transfer of the heart rate/training information.

88. A system for processing heart rate information in a portable computer device, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the portable computer device as defined by Claim 75, wherein the portable computer device includes a real-time heart rate/training information transfer mode and the heart rate sensor includes a normal mode, the portable computer device transferring heart rate/training information from the heart rate sensor to the portable computer device in substantially real-time in response to initiating the real-time heart rate/training information transfer mode, the heart rate sensor being returned to the normal mode in response to completion of the transfer of the heart rate/training information in substantially real-time.

89. A system for processing heart rate information in a personal digital assistant, monitoring by a heart rate monitor, and wirelessly transferring the heart rate information between the heart rate monitor and the personal digital assistant, the system comprising:

a heart rate monitor, the heart rate monitor having a connect mode, the connect mode enabling an infrared communication link to be established with the heart rate monitor;

a personal digital assistant (PDA), the PDA including transfer software, the transfer software controlling the transfer of information between the heart rate monitor and the PDA through the infrared communication link; and

at least one of a first wireless communication interface coupled to the PDA and a second wireless communication interface coupled to the heart rate monitor, the first wireless communication interface enabling the PDA to communicate

through the communication link, the second wireless communication interface enabling the heart rate monitor to communicate through the communication link, at least one of the first wireless communication interface and the second wireless communication interface including at least one of an infrared transmit path and an
5 infrared receive path, the infrared transmit path including an amplifier and an infrared light emitting diode responsive to the amplifier, the infrared receive path including a photo-diode and an amplifier responsive to the photo-diode, the information including at least one of setting information, heart rate information, and training information.